
-continued

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala |
| 210 | | | | 215 | | | | 220 | | | |
| Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala |
| 225 | | | | 230 | | | 235 | | | | 240 |
| Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala | Asn | Pro | Asn | Ala |
| 245 | | | | 250 | | | 255 | | | | |
| Asn | Pro | Asn | Lys | Asn | Asn | Gln | Gly | Asn | Gly | Gln | Gly |
| 260 | | | | 265 | | | 270 | | | | |
| Asn | Asp | Pro | Asn | Arg | Asn | Val | Asp | Glu | Asn | Ala | Asn |
| 275 | | | | 280 | | | 285 | | | | |
| Val | Lys | Asn | Asn | Asn | Glu | Glu | Pro | Ser | Asp | Lys | Ile |
| 290 | | | | 295 | | | 300 | | | | |
| Tyr | Leu | Asn | Lys | Ile | Gln | Asn | Ser | Leu | Ser | Thr | Glu |
| 305 | | | | 310 | | | 315 | | | | Trp |
| Ser | Val | Thr | Cys | Gly | Asn | Gly | Ile | Gln | Val | Arg | Ile |
| 325 | | | | 330 | | | 335 | | | | Lys |
| Ala | Asn | Lys | Pro | Lys | Asp | Glu | Leu | Asp | Tyr | Ala | Asn |
| 340 | | | | 345 | | | 350 | | | | Asp |
| Lys | Ile | Cys | Lys | Met | Glu | Lys | Cys | Ser | Ser | Val | Phe |
| 355 | | | | 360 | | | 365 | | | | Asn |
| Ser | | | | | | | | | | | |

1. A recombinant *Plasmodium falciparum* circumsporozoite protein (rCSP), said rCSP characterized by:
 - an N-terminal region that lacks twenty to twenty-five N-terminus amino acid residues of native *P. falciparum* circumsporozoite protein;
 - a reduced number of NANP repeats compared to native *P. falciparum* circumsporozoite protein; and
 - at least 85% homology to SEQ ID NO:2.
2. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP lacks Met₁ to Cys₂₅ of the N-terminal region of native *P. falciparum* circumsporozoite protein.
3. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP has 18 or 19 NANP repeats.
4. The recombinant *P. falciparum* CSP of claim 3, wherein the rCSP has 19 NANP repeats.
5. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP has a 0 to 3 NVDP repeats.
6. The recombinant *P. falciparum* CSP of claim 5, wherein the rCSP has 3 NVDP repeats.
7. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP has a C-terminal region that lacks ten to fourteen C-terminus amino acid residues of native *P. falciparum* circumsporozoite protein.
8. The recombinant *P. falciparum* CSP of claim 7, wherein the rCSP ends at Ser₃₈₃.
9. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP has at least 90% homology to SEQ ID NO:2.
10. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP has at least 95% homology to SEQ ID NO:2.
11. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP comprises SEQ ID NO:2.
12. The recombinant *P. falciparum* CSP of claim 1, wherein the rCSP comprises SEQ ID NO:8.

13. A nucleotide sequence encoding the recombinant *P. falciparum* CSP of claim 1.
14. A nucleotide sequence comprising SEQ ID NO:1 or a sequence that is at least 85% homologous to SEQ ID NO:1.
15. The nucleotide sequence of claim 14, wherein the nucleotide sequence is 90% homologous to SEQ ID NO:1.
16. The nucleotide sequence of claim 14, wherein the nucleotide sequence is 95% homologous to SEQ ID NO:1.
17. The nucleotide sequence of claim 13, wherein the nucleotide sequence comprises at least one expression tag.
18. The nucleotide sequence of claim 17, wherein the nucleotide sequence is SEQ ID NO:5.
19. An expression vector for *E. coli* comprising the nucleotide sequence of claim 13.
20. A bacterial cell transformed with the expression vector of claim 19.
21. The bacterial cell of claim 20, wherein the cell is an *E. coli* cell.
22. The bacterial cell of claim 21, wherein the *E. coli* is SHUFFLE™ strain.
23. The bacterial cell of claim 21, wherein the *E. coli* cell expresses a recombinant *P. falciparum* CSP as a soluble protein.
24. An anti-malaria vaccine comprising:
 - a recombinant *Plasmodium falciparum* CSP according to claim 1; and
 - one or more adjuvants.
25. The vaccine of claim 24, wherein the adjuvant is Montanide ISA 720.
26. The vaccine of claim 24, wherein the vaccine has an endotoxin level less than about 5 endotoxin units per microgram of protein.
27. The vaccine of claim 24, wherein the vaccine comprises less than about 1 ng/ml of bacterial host proteins.